

PENDING CLAIMS

25. A coated substrate which is a glass, ceramic or vitroceramic substrate provided on at least a portion of one of its faces with a coating having photocatalytic properties, and comprising titanium oxide at least partly crystallized in the anatase form, and obtained by thermal decomposition of titanium precursors selected from the group consisting of organo-metallic precursors and metallic halide precursors, wherein said coating has a thickness between 5 and 50 nm, wherein the crystallized titanium oxide is in the form of crystallites with an average size of between 60 and 100 nm.

26. A coated substrate which is a glass, ceramic or vitroceramic substrate provided on at least a portion of one of its faces with a coating having a photocatalytic properties, and comprising titanium oxide at least partly crystallized in the anatase form, and a thin layer forming a barrier to alkali metals originating from the substrate, and located between said substrate and said coating, wherein the crystallized titanium oxide is in the form of crystallites with an average size of between 60 and 100 nm.

27. A coated substrate which is a glass, ceramic or vitroceramic substrate provided on at least a portion of one of its faces with a coating having photocatalytic properties, and comprising titanium oxide at least partly crystallized in the anatase form, and wherein said coating is hydrophilic, and has a contact angle with water below 5 after exposure to luminous rays, wherein the crystallized titanium oxide is in the form of crystallites with an average size of between 60 and 1000 nm.

28. A coated substrate which is a glass, ceramic or vitroceraic substrate provided on at least a portion of one of its faces with a coating having photocatalytic properties, and comprising titanium oxide at least partly crystallized in the anatase form, and wherein said coating has a root mean square (RMS) rugosity between 2 and 20 nm, wherein the crystallized titanium oxide is in the form of crystallites with an average size of between 60 and 100 nm.

29. Glass, ceramic or vitroceraic substrate provided on at least one of its faces with a coating having photocatalytic properties and containing at least partially crystalline titanium oxide and having a thickness between 10 and 80 nm.

30. The glass, ceramic or vitroceraic substrate according to claim 29, wherein said thickness is between 20 and 50 nm.

34. A coated substrate which is a glass, ceramic or vitroceraic substrate provided on at least a portion of one of its faces with a coating having photocatalytic properties and comprising titanium oxide at least partly crystallized in the anatase form, wherein said coating contains also at least one oxide with a lower refractive index than titanium oxide, the titanium content of the coating being at least 40%, by weight with respect to the total weight of oxides in the coating.

35. The coated substrate according to claim 34, wherein said titanium content is at least 50% by weight with respect to the total weight of oxides in the coating.

36. A coated substrate which is a glass, ceramic or vitroceramic substrate provided on at least a portion of one of its faces with a coating having photocatalytic properties and comprising titanium oxide at least partly crystallized in the anatase form, wherein there is at least a layer arranged between the substrate and said coating, said layer being electrically conductive.

37. A coating according to claim 36, wherein the conductive layer is selected from the group consisting of indium tin oxide, tin oxide doped with fluorine, tin oxide doped with antimony, zinc oxide doped with fluorine, zinc oxide doped with aluminium, zinc oxide doped with tin, tin oxides that are stoichiometrically deficient in oxygen, and zinc oxides that are stoichiometrically deficient in oxygen.

38. An electrically controlled variable absorption glazing wherein at least one of the external faces of said glazing is provided with a coating having photocatalytic properties and comprising titanium oxide at least partly crystallized in the anatase form.

39. A windshield wherein at least the face of said windshield turned toward the inside of the passenger compartment is provided with a coating having photocatalytic properties and comprising titanium oxide at least partly crystallized in the anatase form.

44. A coated substrate which is a glass, ceramic or vitroceramic substrate provided on at least one of its faces with a coating with photocatalytic properties, containing titanium oxide and doped by at least one metal selected from the group consisting of Nb, Ta, Fe, Bi, Co, Ni, Cu, Rh, Ce, and Mo.

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45. The coated substrate according to claim 44, wherein the coating is deposited by reactive or non-reactive cathodic sputtering.